

Aggregate Category Level Analysis (CEFS/TREND program)

Annual Average Emission Trends

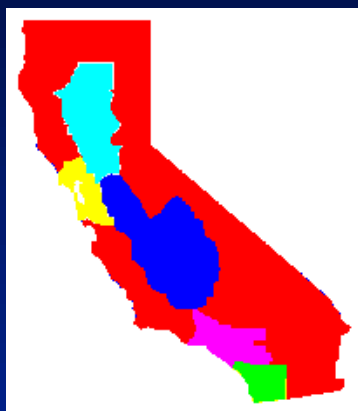
- Annual average emission trends are developed at the SCC/SIC, EIC level and reported using ARB's standard EIC division and subcategory convention
- Trend analyses focuses on the major emission changes which are evident in major emission sectors as a result of growth and / or control

Annual Average Emission Trends

- “Pre-base-year” period
 - Point Sources: All historical reported inventory data are retained
 - Areawide, aggregated point: These categories are backcasted to account for improvements in estimation methods
 - Other Mobile: Outputs from the OFFROAD model
 - On-Road: Outputs from the EMFAC model

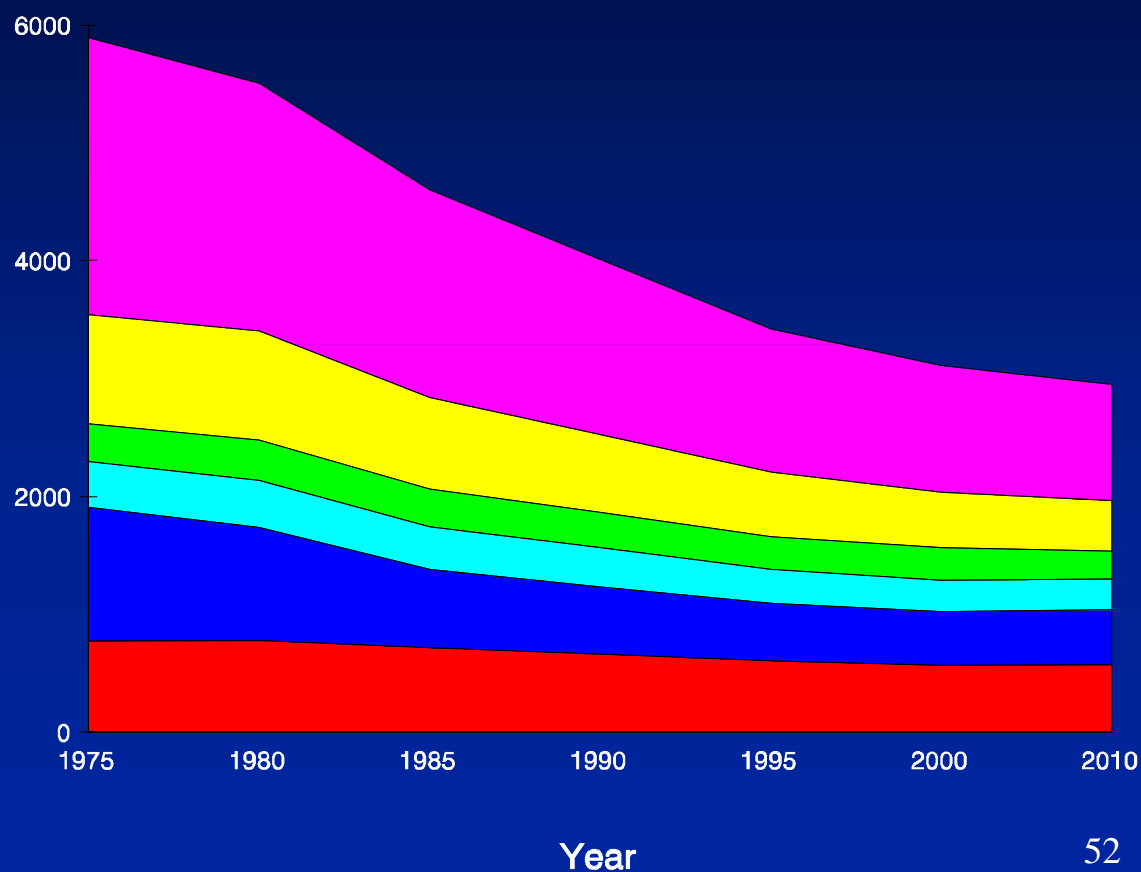
Emission Trends “The Big Picture”

ROG Emissions by Air Basin



- South Coast Air Basin
- San Francisco Bay Area Air Basin
- San Diego Air Basin
- Sacramento Valley Air Basin
- San Joaquin Valley Air Basin
- All Other Air Basins

Tons/Day



Planning Emission Projections

Planning Projections

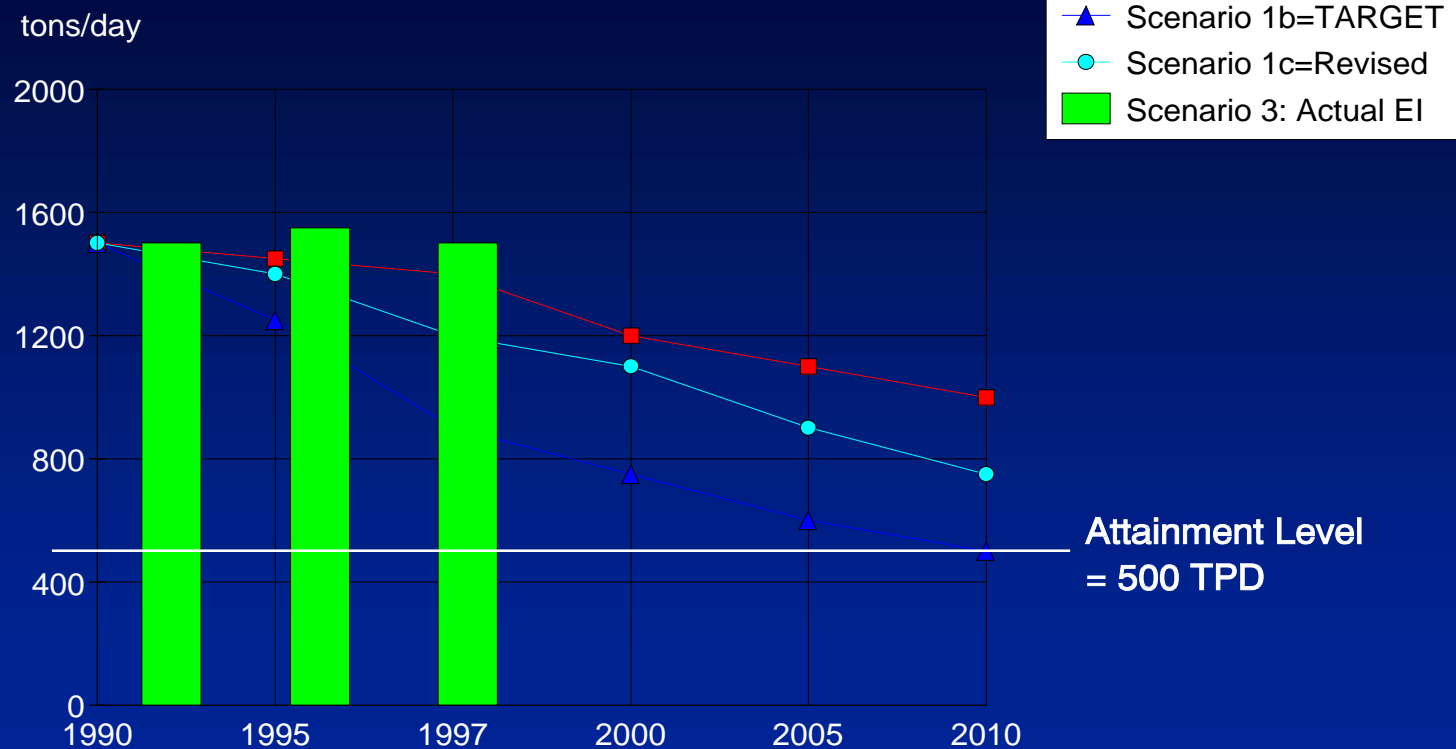
- Planning Projection = Forecasted Seasonal Inventory by Emission Category (SCC/SIC, EIC)
 - Typically a summer season for ROG and NO_x
 - Typically a winter season for CO
 - Other seasons or monthly periods possible
 - The starting place is to develop a baseline forecast which accounts for all adopted emission controls

Planning Projections (cont)

- Then develop a planning forecast which includes the adopted rules and proposed measures in the plan
- “What-if” scenario analysis for plan development

Planning Projections and SIP Tracking Scenarios

<< Hypothetical >> Summer Seasonal -- ROG



Reporting Parameters:
REGION
POLLUTANT
SOURCE_CAT
YEAR

SIP Progress Tracking

- Two basic questions and analytical levels:
 - (1) Does the control plan predict attainment from the point of view of required emission reductions for the inventory as a whole?
 - (2) Are the emission reduction requirements for the particular measure(s) being met?

SIP Progress Tracking

(continued)

What's Involved???

- Associate inventory controls to each individual rule or regulation
- “Frozen” plan inventory and updated working inventory projections with both adopted and planned measures
- Compare updated (“Recalibrated”) projections to original plan targets

SIP Progress Tracking

(continued)

- Scenario 1: “Common Currency” Assessment
 - Uses the “frozen” 1990 EI as the benchmark
 - Growth assumptions are also “frozen” based on 1994 SIP scenario
 - Control levels are updated to reflect rules adopted since the SIP

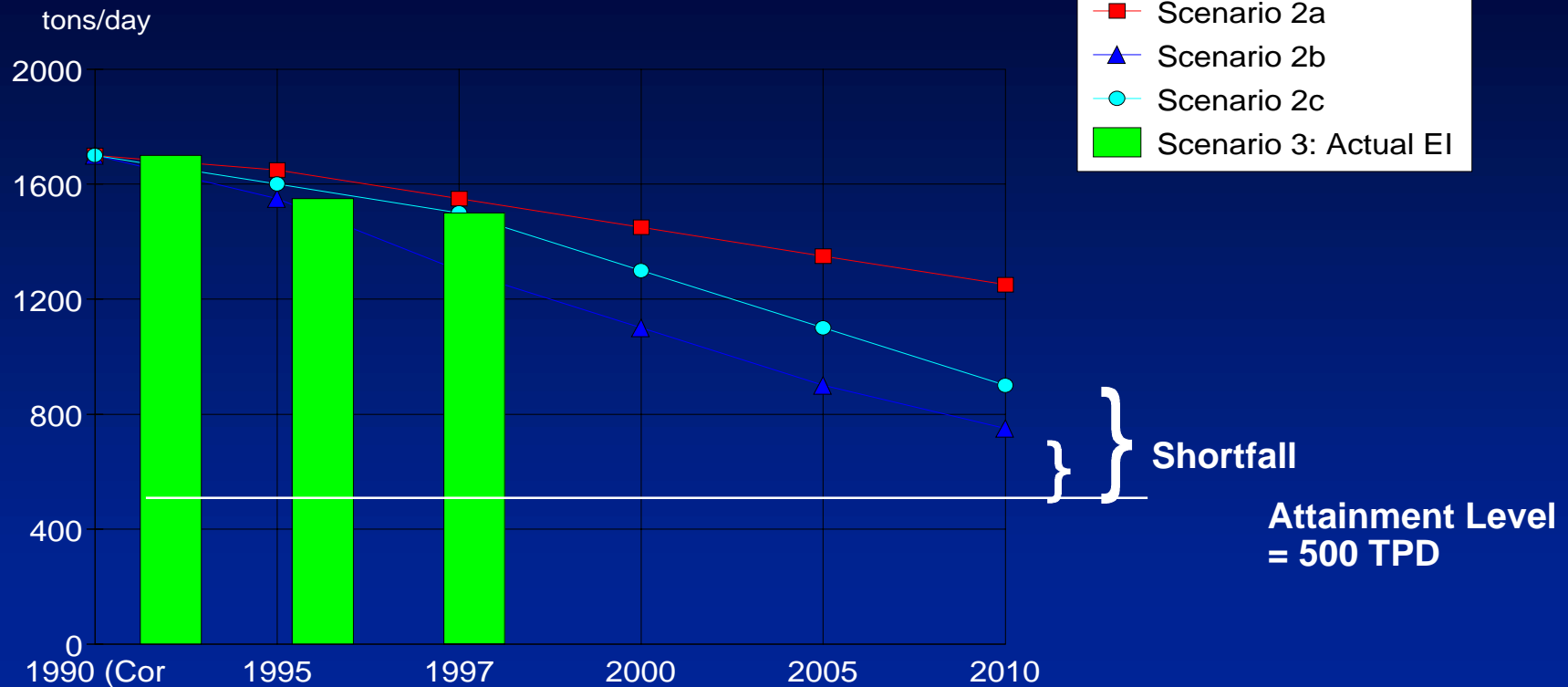
SIP Progress Tracking

(continued)

- Scenario 2: “Recalibrated”
 - Forecasts are based on the most current EI available (e.g. 1997)
 - 1990 EI is reconstructed to provide a more accurate benchmark for measuring progress
 - Typical approach is to retain historical point source data and backcast area source categories
 - Growth assumptions are revised to reflect most recent information on the economy and demographics
 - Control levels are updated to reflect:
 - Rules adopted since the SIP
 - “Real-World” implementation of the “planned” measures yet to be adopted

“Recalibrated” SIP Tracking Scenarios

<<Hypothetical>> Summer Seasonal -- ROG



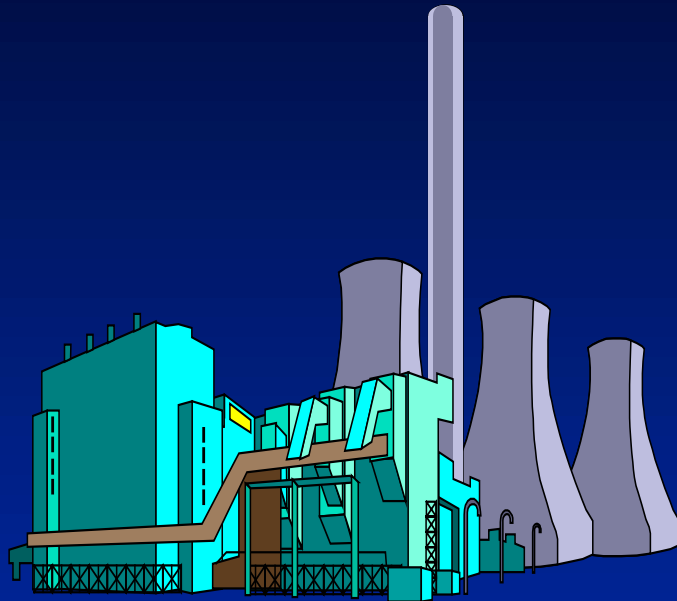
Reporting Parameters:
REGION
POLLUTANT
SOURCE_CAT
YEAR

* The 1990 inventory is reconstructed to account for methodology improvements.

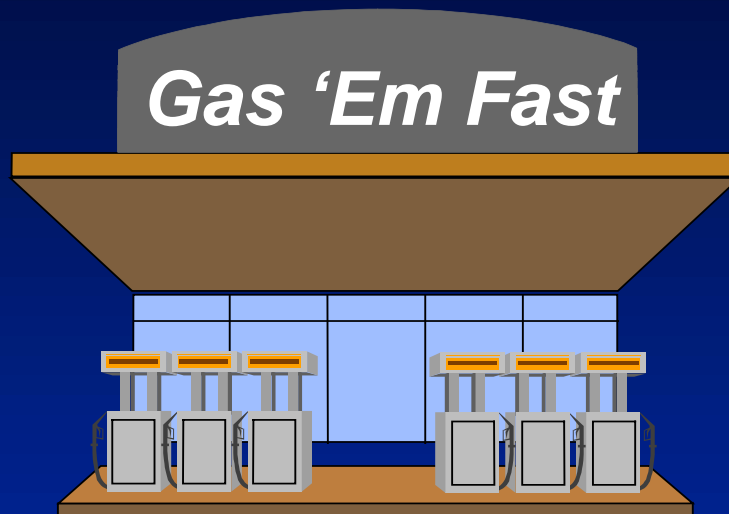
Rule Tracking (RT) Component

- Brings inventory and rule efforts together
- CEFS does not support control category level information (all control data must be rule-source specific)
- ARB to develop RT data for state and federal sectors
- Districts to develop RT data for local sectors
- A few districts have submitted comprehensive RT data sets
- “Adopted” and “Planned” measures to be supported
 - More later in the Control Profile Development session

Tracking Levels: Stationary Sources



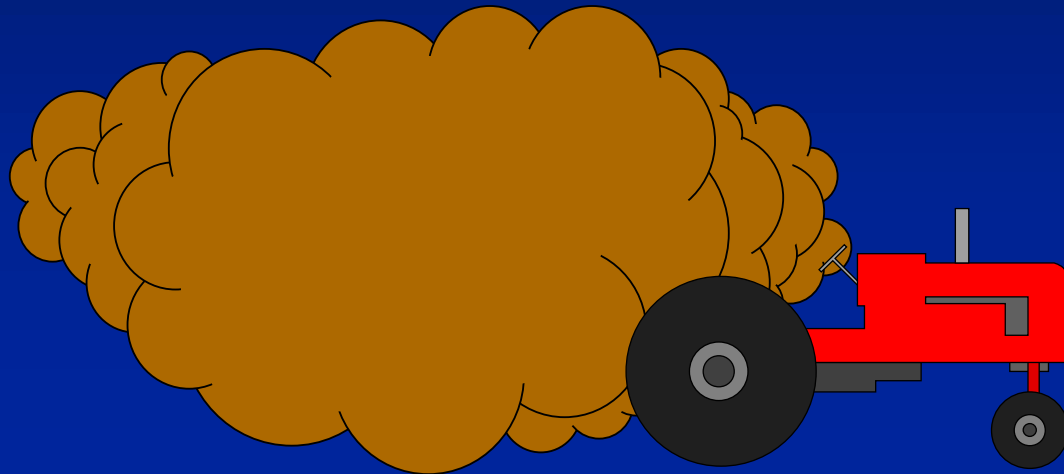
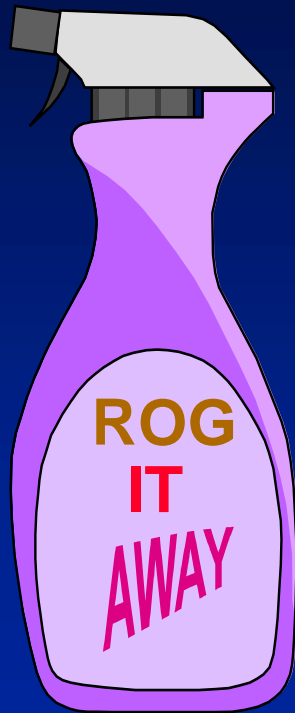
Point
(SCC or SCC/SIC LEVEL)



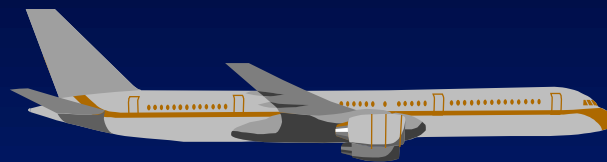
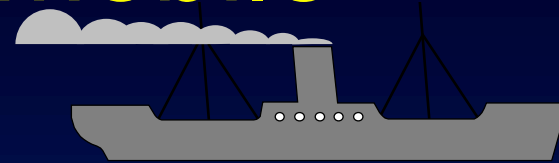
Aggregated
Point
(EIC LEVEL)

Tracking Levels: Area-Wide

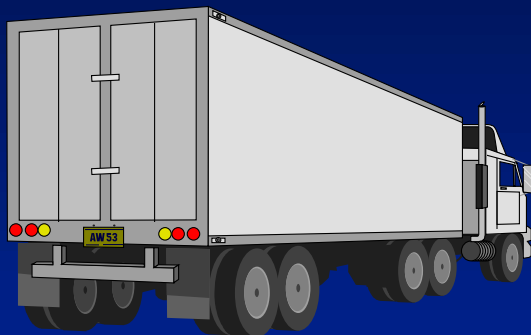
(EIC LEVEL)



Tracking Levels: Mobile



Other Mobile (Evaluated with
the OFFROAD model)



On-Road (Evaluated with
the EMFAC model)

